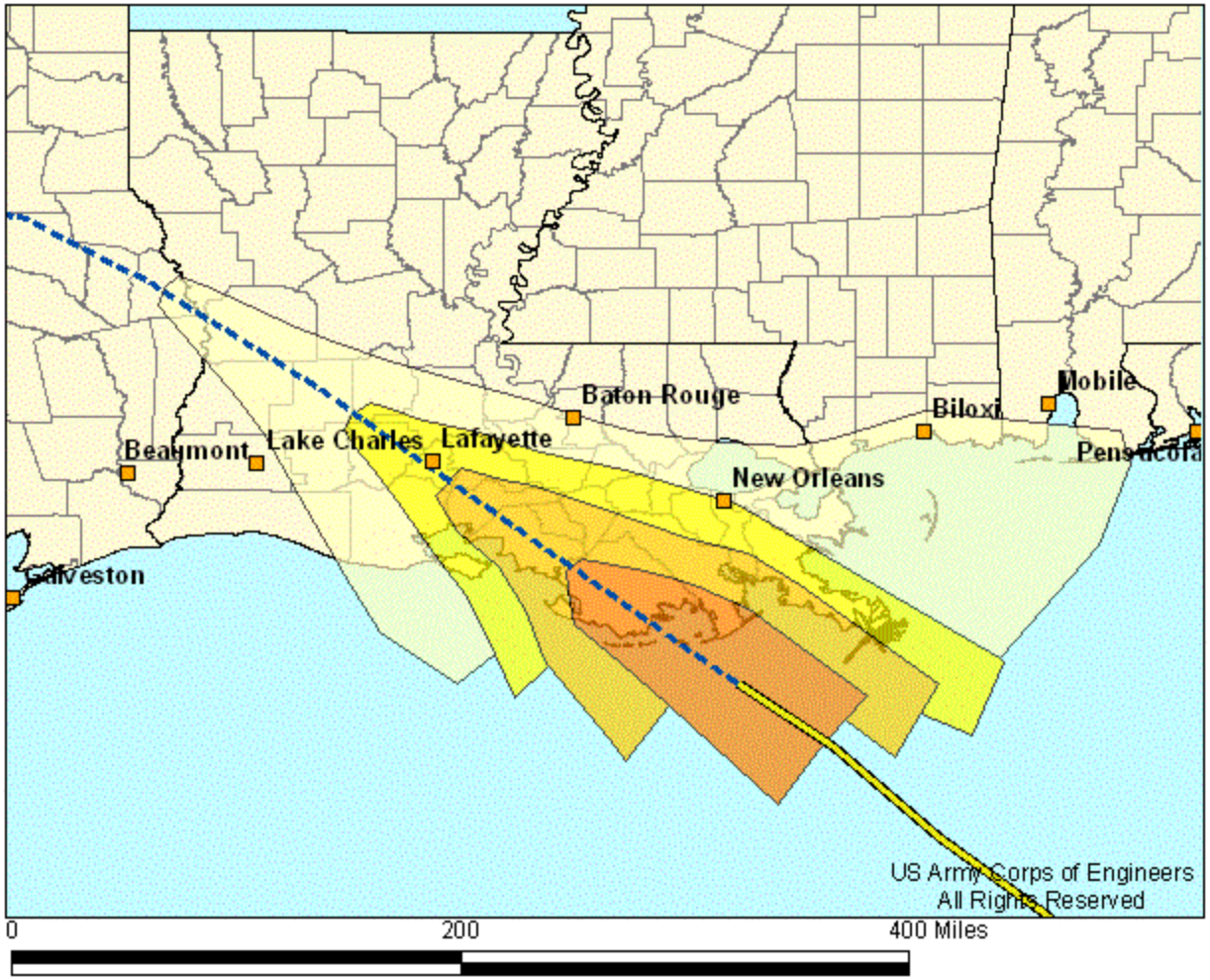
Hurricane Gustav Projected Damage Areas

US Army Corps of Engineers

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Projected Damage Areas

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

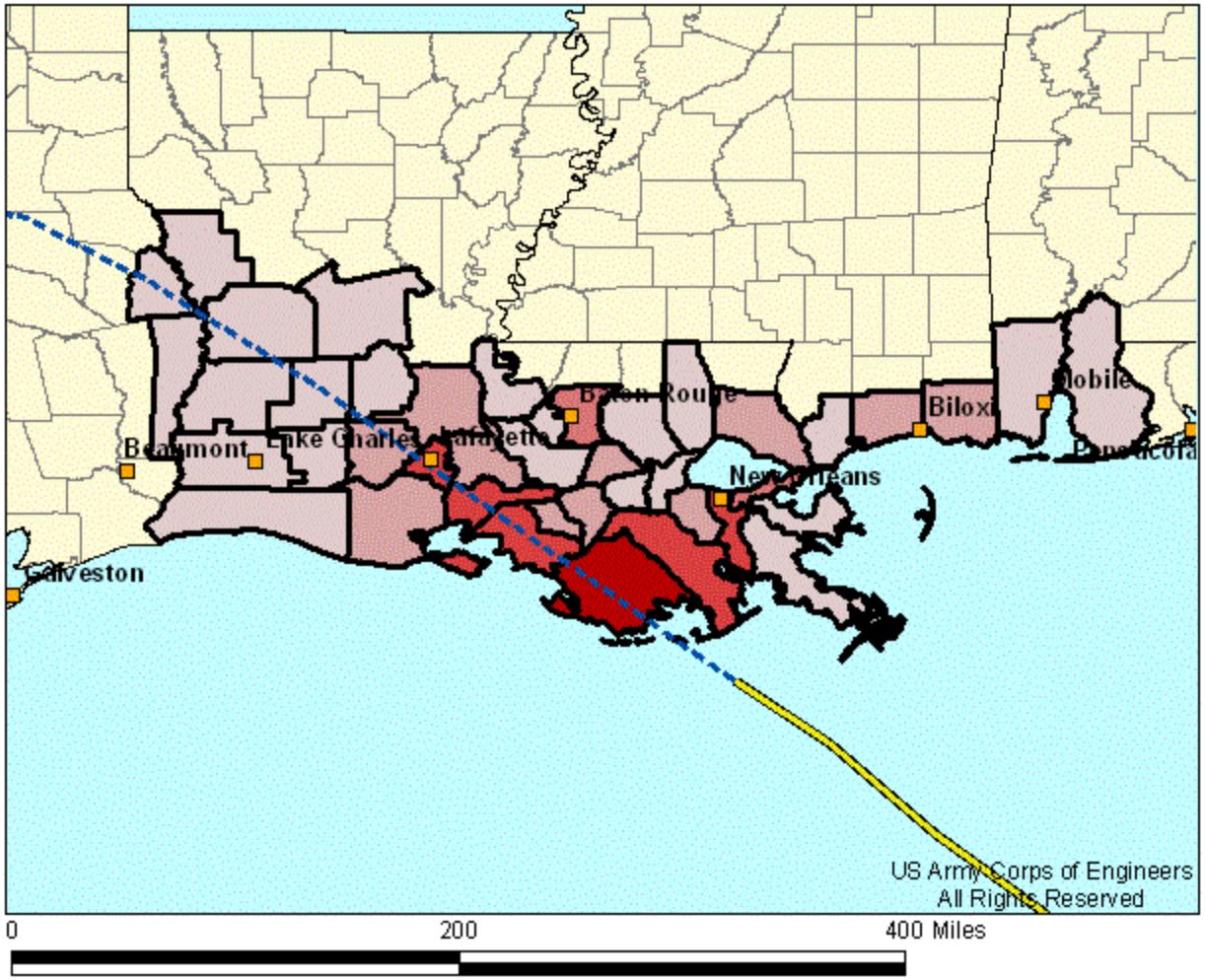
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About **5** Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Louisiana - 7,859,000 Yards
Mississippi - 450,000 Yards
Alabama - 104,000 Yards
Texas - 12,000 Yards

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englinkusace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Debris Model	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 2 of 20

US Army Corps of Engineers

Hurricane Gustav Debris Model

Landfall Expected In About 5 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Alabama		Baldwin	73,000
		Mobile	31,000
Alabama	104,000		
Louisiana		Acadia	135,000
		Allen	40,000
		Ascension	125,000
		Assumption	149,000
		Avoyelles	< 1,000
		Beauregard	48,000
		Calcasieu	9,000
		Cameron	4,000
		East Baton Rouge	465,000
		Evangeline	52,000
		Iberia	620,000
		Iberville	51,000
		Jefferson	979,000
		Jefferson Davis	49,000
		Lafayette	551,000
		Lafourche	999,000
		Livingston	47,000
		Orleans	454,000
		Plaquemines	76,000
		Pointe Coupee	13,000
		Rapides	5,000
		Sabine	6,000
		St Bernard	30,000
		St Charles	116,000
		St James	44,000
		St John the Baptist	74,000
		St Landry	176,000

State	Yards per State	County	Yards per County
Louisiana		St Martin	206,000
(continued)		St Mary	537,000
		St Tammany	125,000
		Tangipahoa	8,000
		Terrebonne	1,373,000
		Vermilion	196,000
		Vernon	72,000
		West Baton Rouge	25,000
Louisiana	7,859,000		
Mississippi		Hancock	48,000
		Harrison	227,000
		Jackson	175,000
Mississippi	450,000		
Texas		Newton	4,000
		Sabine	8,000
Texas	12,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Gustav Debris Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

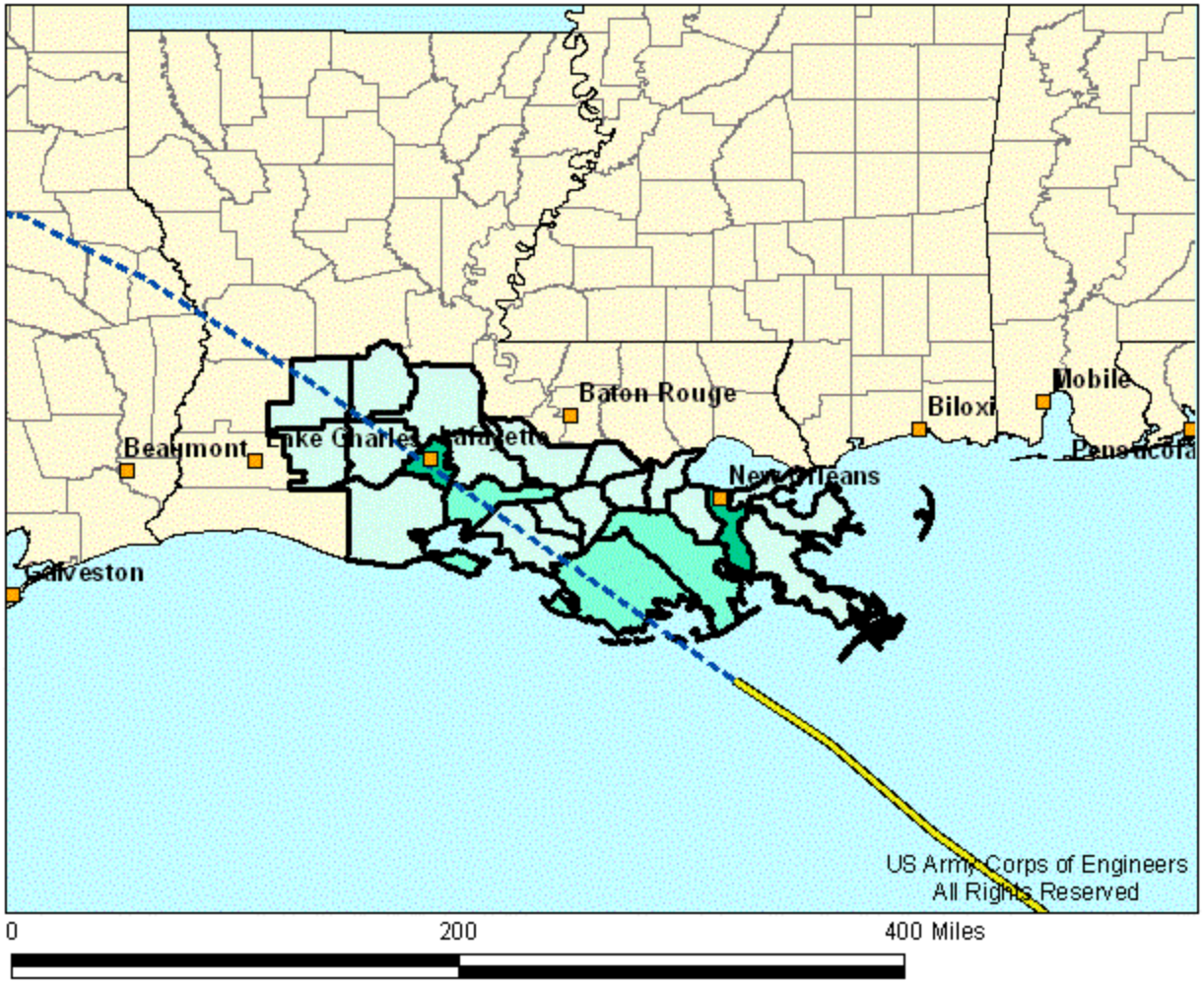
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Commodities Model

US Army Corps of Engineers

Landfall Expected In About **5** Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Louisiana – 20/40/81 Truckloads

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC ***(0500 EDT 09/01/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Commodities Model	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 20

US Army Corps of Engineers

Hurricane Gustav Commodities Model

Landfall Expected In About **5** Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Louisiana		Acadia	4
		Allen	1
		Ascension	2
		Assumption	2
		Evangeline	1
		Iberia	5
		Iberville	1
		Jefferson	14
		Jefferson Davis	1
		Lafayette	12
		Lafourche	6
		Orleans	3
		Plaquemines	2
		St Bernard	1
		St Charles	3
		St James	2
		St John the Baptist	2
		St Landry	3
		St Martin	3
		St Mary	3
		Terrebonne	7
		Vermilion	3
Louisiana	81		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Commodities Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

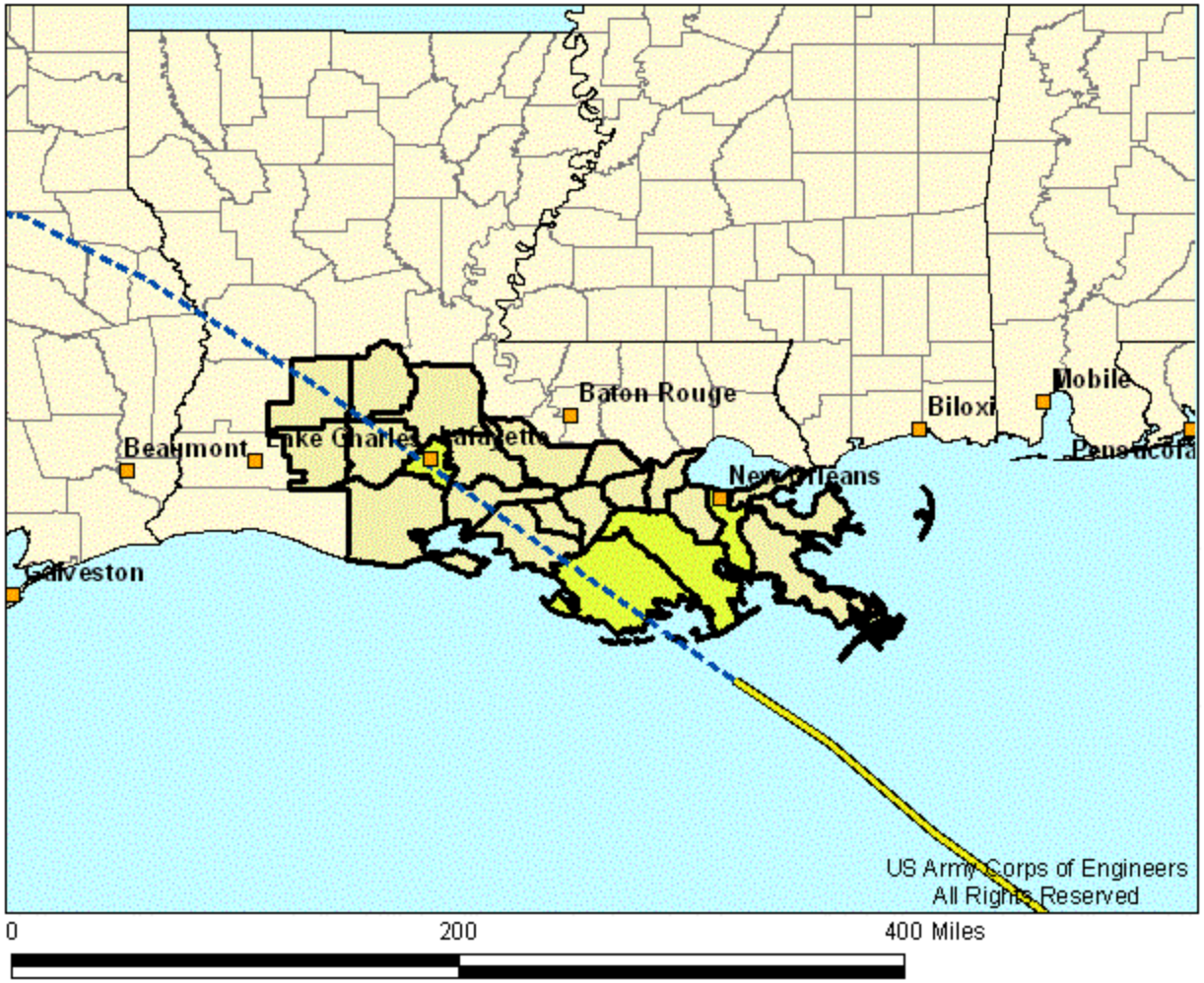
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Roofing Model

US Army Corps of Engineers

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Louisiana - 18,100

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast. Temporary roofing is based on 3% in CAT 1, 6% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Roofing Model	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 20

US Army Corps of Engineers

Hurricane Gustav Temporary Roofing Model

Landfall Expected In About 5 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Acadia	600
		Allen	< 100
		Ascension	300
		Assumption	500
		Evangeline	< 100
		Iberia	1,600
		Iberville	200
		Jefferson	2,600
		Jefferson Davis	< 100
		Lafayette	2,500
		Lafourche	2,100
		Orleans	600
		Plaquemines	300
		St Bernard	< 100
		St Charles	600
		St James	300
		St John the Baptist	300
		St Landry	400
		St Martin	700
		St Mary	1,200
		Terrebonne	2,700
		Vermilion	600
Louisiana	18,100		

Temporary roofing is based on 3% in CAT 1, 6% in CAT 2 and 11% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Roofing Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Gustav Temporary Housing Model

US Army Corps of Engineers

Landfall Expected In About 5 Hours

For Planning Purposes Only!

Post Landfall Temporary Housing Model Results

Louisiana - 1,400

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast. Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 8 of 20

US Army Corps of Engineers

Hurricane Gustav Temporary Housing Model

Landfall Expected In About 5 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Louisiana		Assumption	< 100
		Iberia	300
		Jefferson	< 100
		Lafayette	< 100
		Lafourche	400
		Plaquemines	< 100
		St Charles	< 100
		St Martin	< 100
		St Mary	200
		Terrebonne	500
		Vermilion	< 100
Louisiana	1,400		

Temporary housing is based on 1% in CAT 2 and 2% in CAT 3.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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Hurricane Gustav Housing Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About 5 Hours

For Planning Purposes Only!

Post Landfall Population Model Results

Louisiana - 1,182,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track
Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Population Model	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 20

US Army Corps of Engineers

Hurricane Gustav Population Model

Landfall Expected In About **5** Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Louisiana		Acadia	54,000
		Allen	< 1,000
		Ascension	22,000
		Assumption	23,000
		Evangeline	4,000
		Iberia	76,000
		Iberville	13,000
		Jefferson	234,000
		Jefferson Davis	< 1,000
		Lafayette	205,000
		Lafourche	93,000
		Orleans	46,000
		Plaquemines	19,000
		St Bernard	< 1,000
		St Charles	51,000
		St James	21,000
		St John the Baptist	22,000
		St Landry	37,000
		St Martin	52,000
		St Mary	52,000
		Terrebonne	109,000
		Vermilion	49,000
Louisiana	1,182,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Population Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

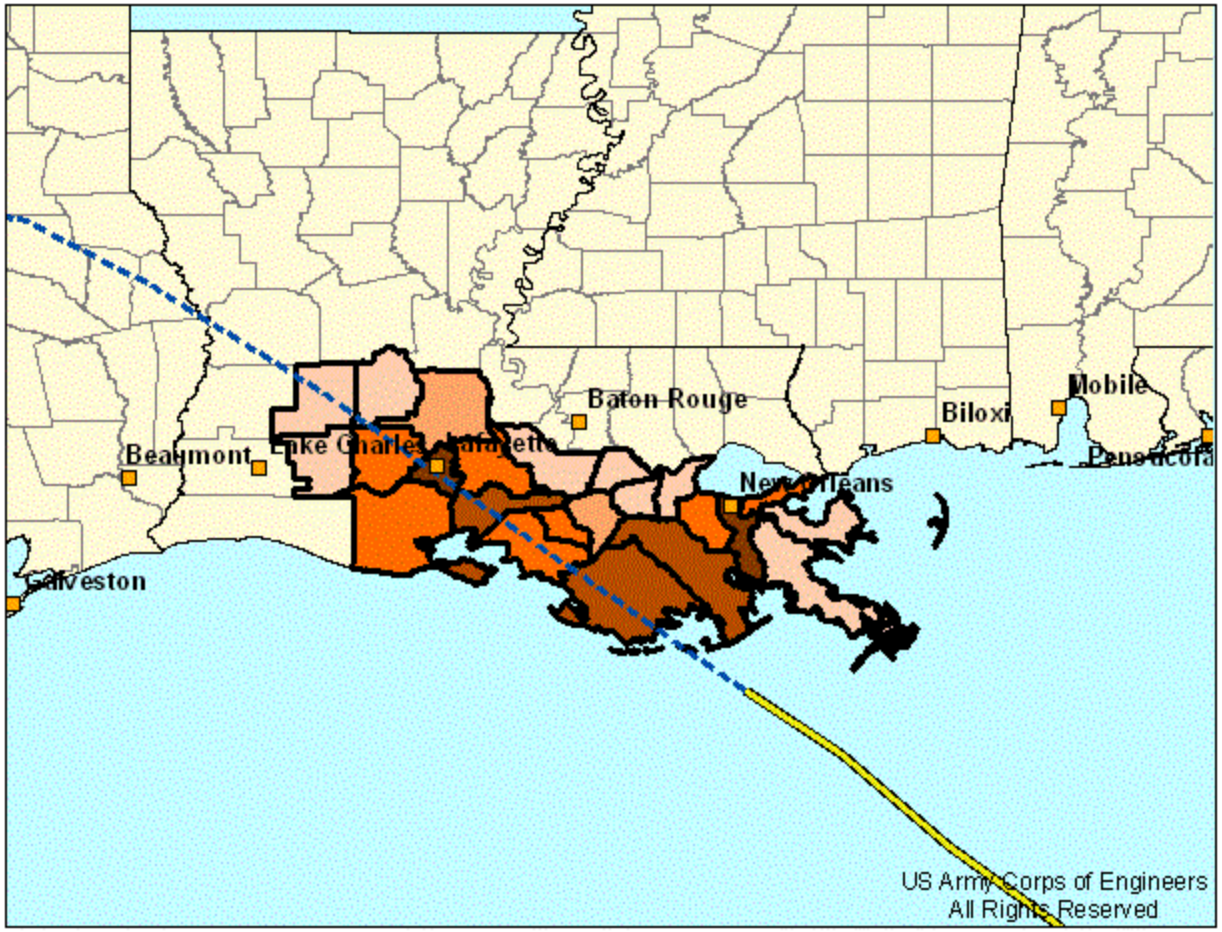
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About 5 Hours

For Planning Purposes Only!



0 200 400 Miles

Post Landfall Households Model Results

Louisiana - 436,000

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Forecast Track

Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Households Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Households Model

Landfall Expected In About **5** Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Louisiana		Acadia	20,000
		Allen	< 1,000
		Ascension	8,000
		Assumption	9,000
		Evangeline	2,000
		Iberia	27,000
		Iberville	5,000
		Jefferson	85,000
		Jefferson Davis	< 1,000
		Lafayette	78,000
		Lafourche	34,000
		Orleans	20,000
		Plaquemines	7,000
		St Bernard	< 1,000
		St Charles	18,000
		St James	7,000
		St John the Baptist	8,000
		St Landry	14,000
		St Martin	19,000
		St Mary	19,000
		Terrebonne	38,000
		Vermilion	18,000
Louisiana	436,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.enqlink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane Gustav Households Model

Generated By:
Siemsen, LRL 0700 EDT 09/01/2008

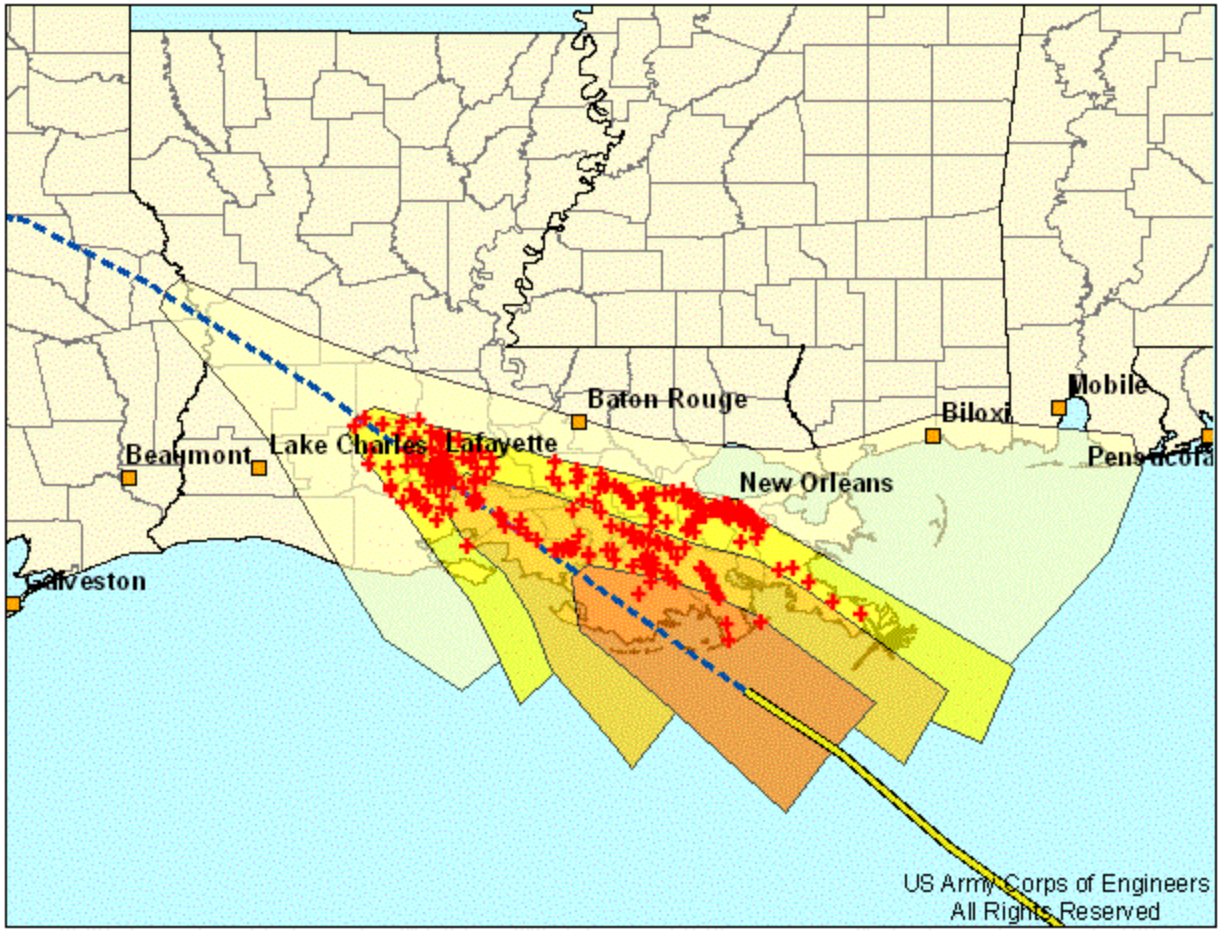
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Gustav Fire Stations

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Louisiana - 238

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

+ Fire Stations
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

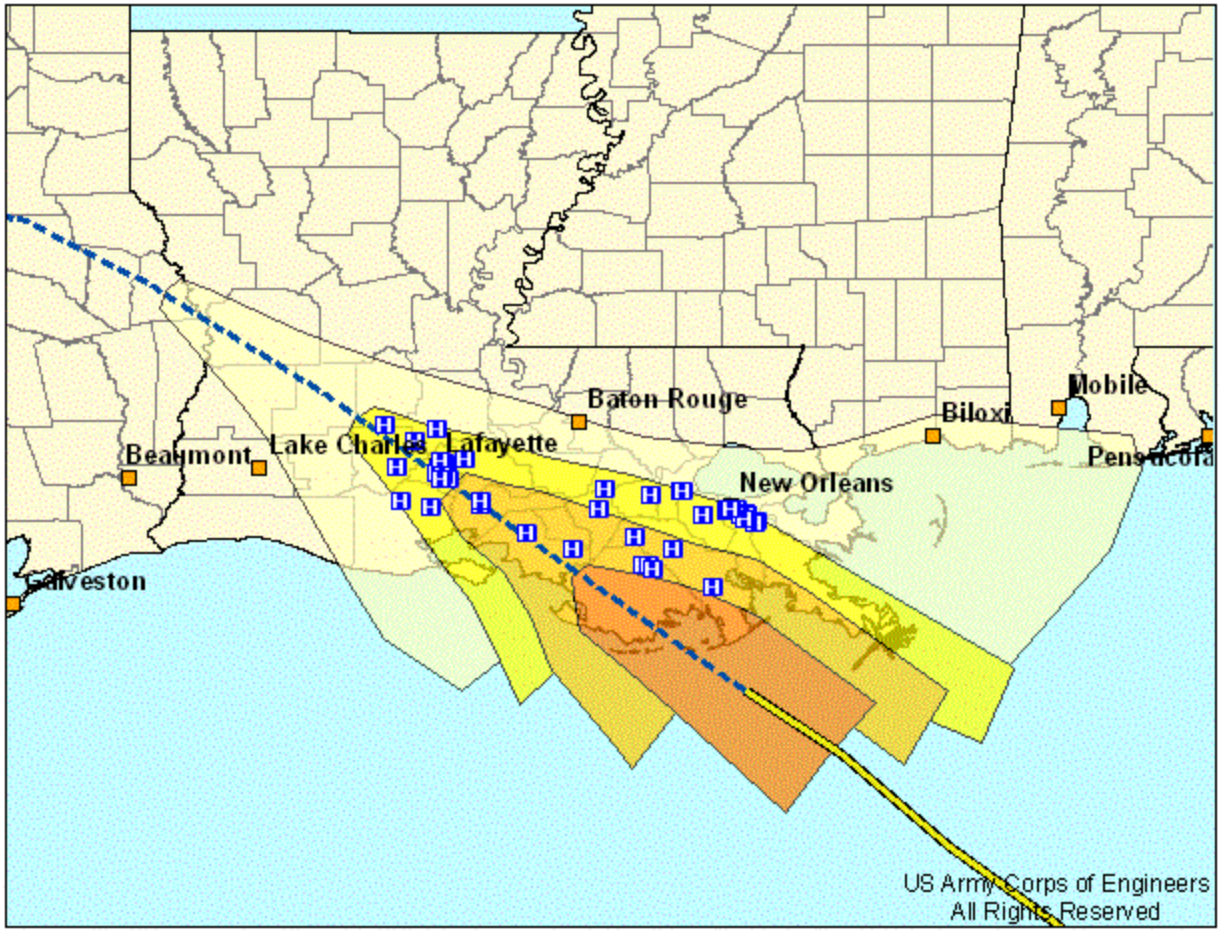
Hurricane Gustav Fire Stations	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane Gustav Hospitals

Landfall Expected In About 5 Hours

For Planning Purposes Only!



0 200 400 Miles

Most Probable Landfall Hospitals Inside Hurricane Force Winds

Louisiana - 54

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

H Hospitals
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Hospitals	
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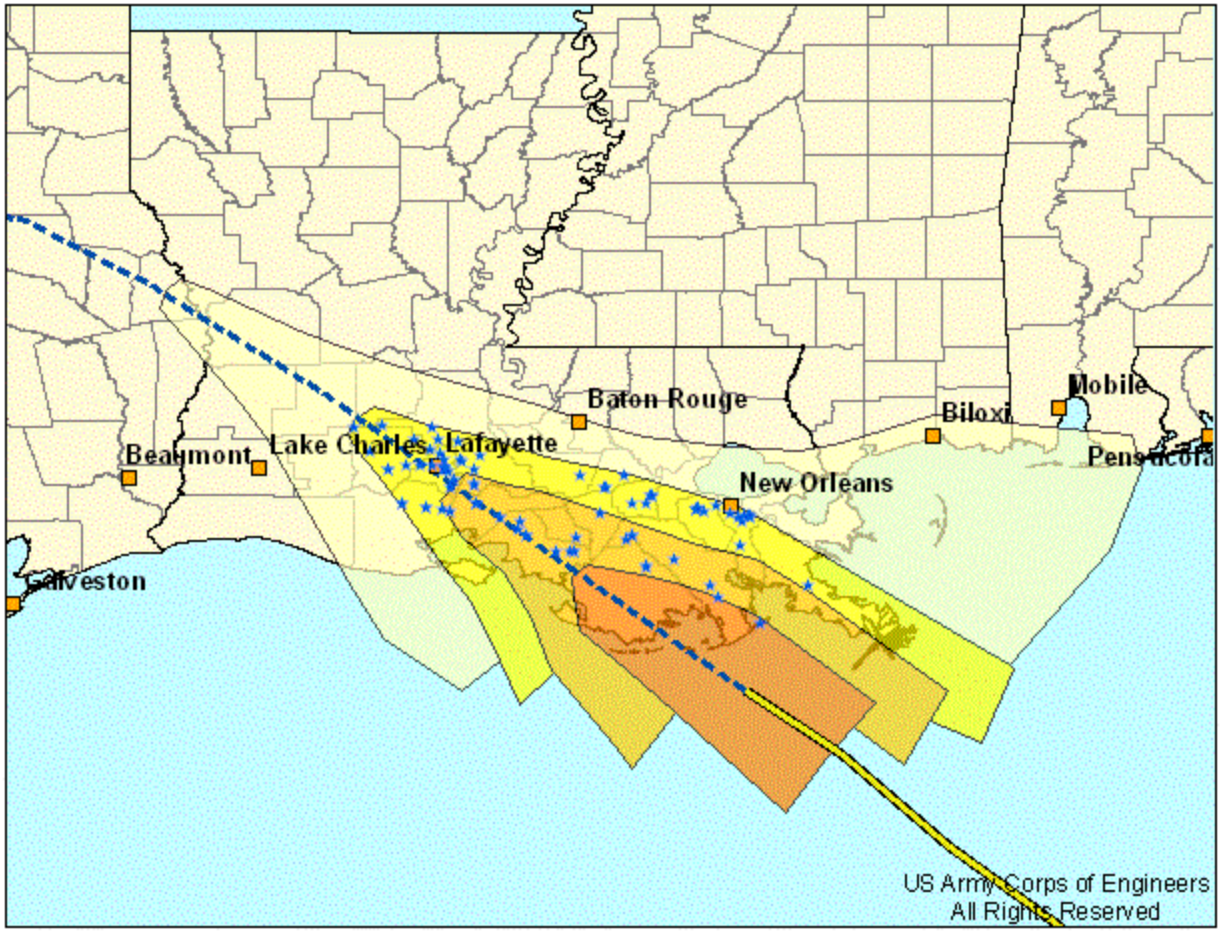
Sources: HURREVAC LRL-DEBRIS	Page 15 of 20

US Army Corps of Engineers

Hurricane Gustav Law Enforcement

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Louisiana - 84

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Law Enforcement
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Law Enforcement	
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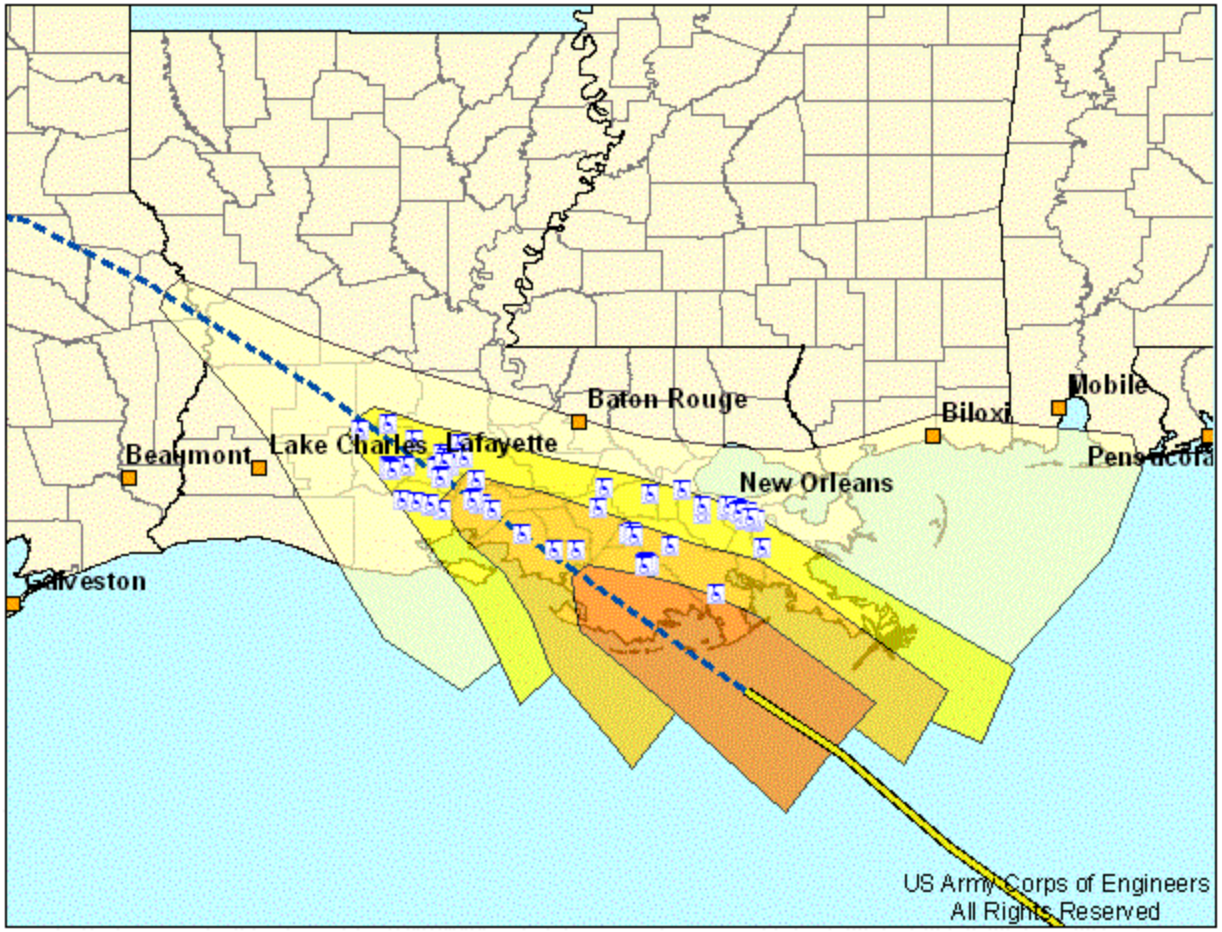
Sources: HURREVAC LRL-DEBRIS	Page 16 of 20

US Army Corps of Engineers

Hurricane Gustav Nursing Homes

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Louisiana - 93

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Nursing Homes
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

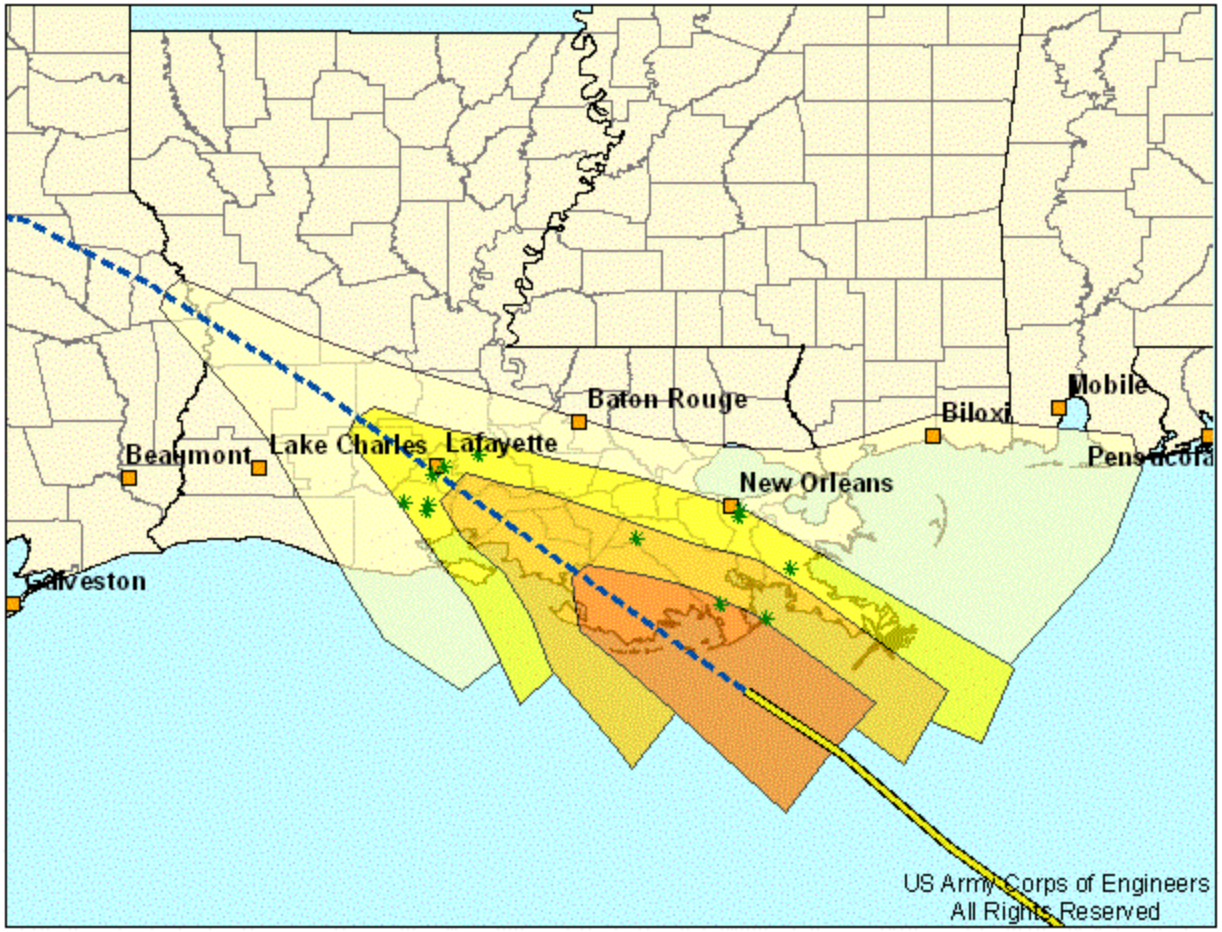
Hurricane Gustav Nursing Homes	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 17 of 20

US Army Corps of Engineers

Hurricane Gustav Potable Water

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Most Probable Landfall Potable Water Inside Hurricane Force Winds

Louisiana - 12

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Potable Water
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of potable water included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

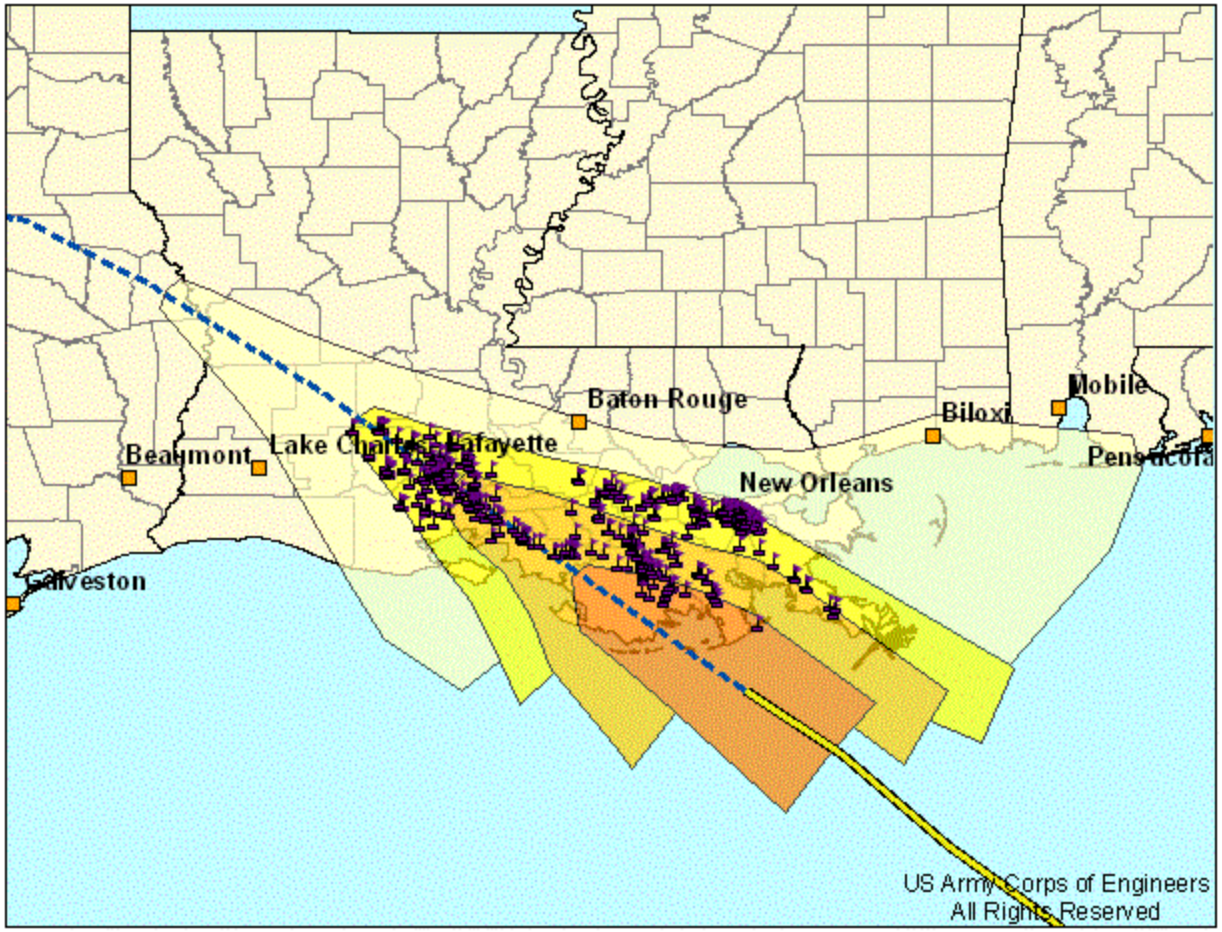
Hurricane Gustav Potable Water	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 20

US Army Corps of Engineers

Hurricane Gustav Schools

Landfall Expected In About **5** Hours

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

Louisiana - 565
Mississippi - 1

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Schools
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

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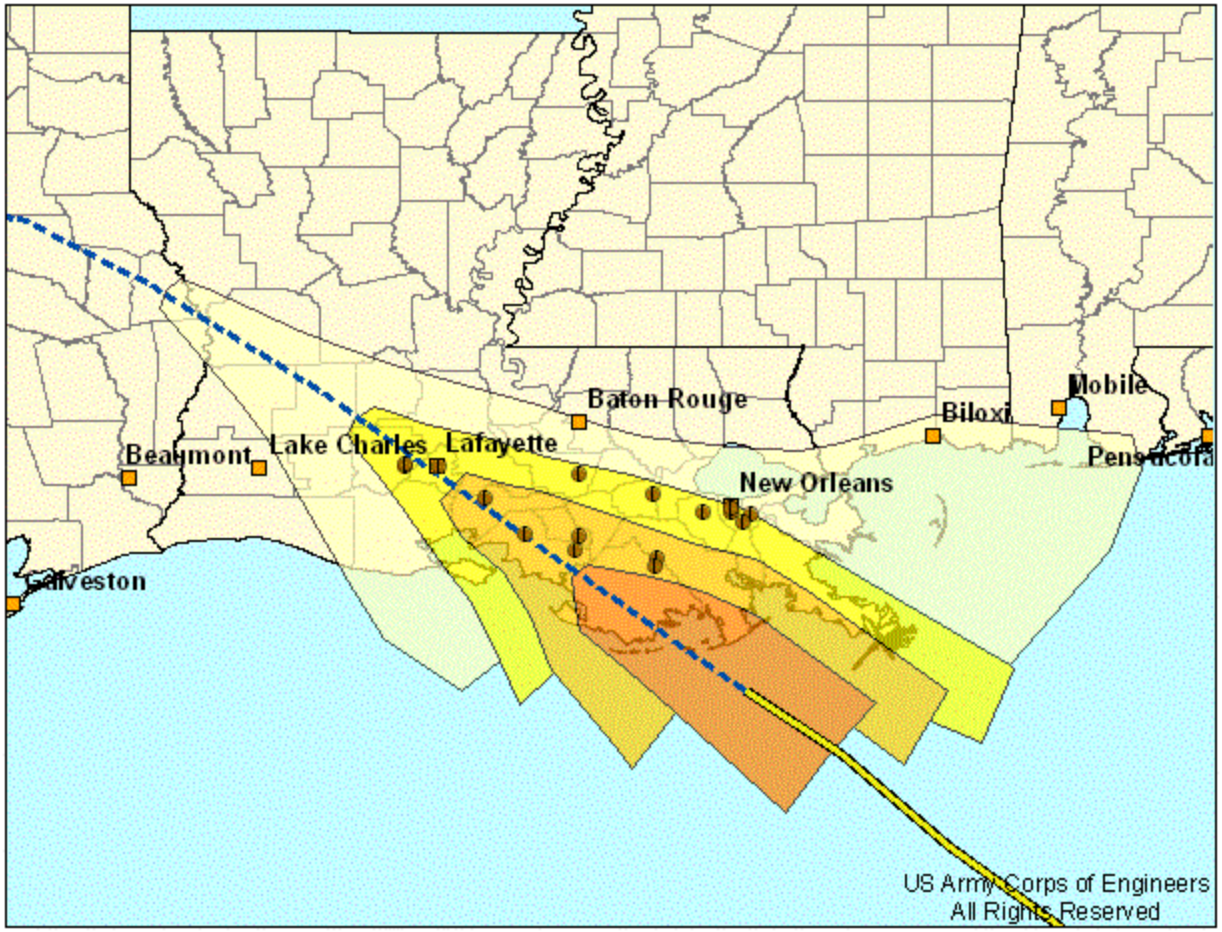
Hurricane Gustav Schools	
Generated By: Siemsen, LRL 0700 EDT 09/01/2008	
Sources: HURREVAC LRL-DEBRIS	Page 19 of 20

Hurricane Gustav Sewage Treatment Plants

US Army Corps of Engineers

Landfall Expected In About 5 Hours

For Planning Purposes Only!



Most Probable Landfall Sewage Treatment Plants Inside Hurricane Force Winds

Louisiana - 17

Model results per County on following page

This model is based on a Category 3 storm making landfall near Port Fourchon, LA.

Sewage Treatment Plants
Forecast Track
Historic Track

Information provided on this page displays a Category 3 storm making landfall near Port Fourchon, LA. These projections are based on information from the NHC (0500 EDT 09/01/2008) forecast.

The number of sewage treatment plants included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane Gustav Sewage Treatment Plants	
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